

METHOD FOR MAKING MICROABRASIVE TOOLS

ABSTRACT OF THE DISCLOSURE

A microabrasive tool is formed from a slurry including liquid, abrasive grains, a bonding material, and a polymer--for example, gellan gum. The slurry is cast in a mold, and the polymer is ionically cross-linked. Cross-linking the polymer fixes the structure of the bonding material and the abrasive grains, wherein the abrasive grains are dispersed substantially uniformly within the bonding material. The ionically cross-linked structure of bonding material and abrasive grains can then be fired to form a microabrasive tool.

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